

# An optical analysis of voids lens effects

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## 1. Introduction

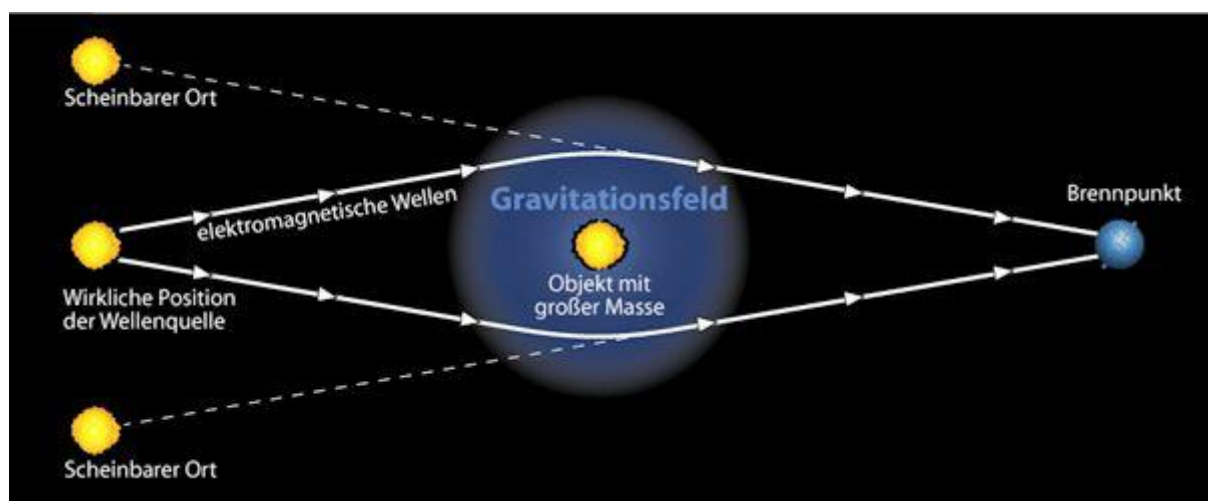
When viewing the images from different telescopes, I noticed that the lenses have a serious impact on the telescope images as cosmic voids. According to astronomers, the effects on some images are caused by gravitational lenses, however, one on closer inspection, one can see that actually the voids as invisible lenses do cause serious optical effects.

Therefore, the telescope images do not show the reality, as we know it with our cameras, but they do show complex natural lens effects with which our view is adulterated into the depths of the universe with optical illusions. The detailed analysis of the voids-lenses provides us with an alternative explanation for the ubiquitous cosmic lenses.

### Gravitational lenses

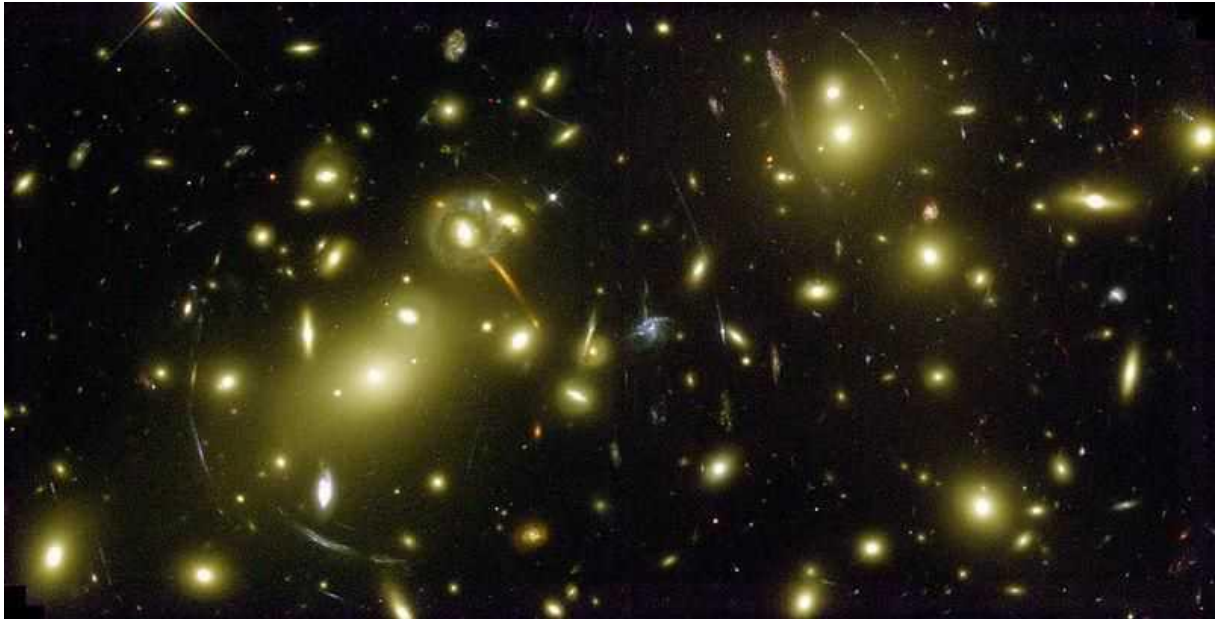
In astronomy, for some time, the phenomenon of lens effects is known and they are attributed to the gravity of massive celestial objects such as galaxies and galaxy clusters. According to this model, the light is similar to a lens, is distracted of massive celestial objects and this may lead to multiple images. By the deflection of light beams an amplification attenuation, and distortion of the observed celestial objects takes place.

**Figure 1: Gravitational lens - basic representation**



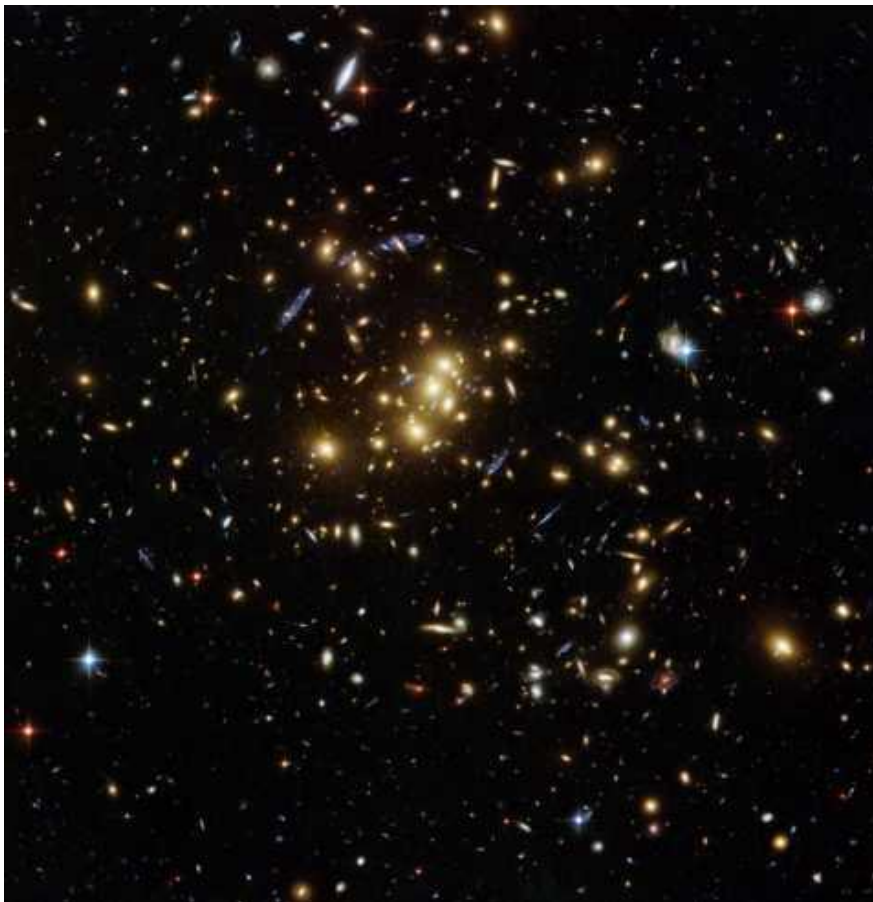
Source: <http://de.wikipedia.org/wiki/Gravitationslinseneffekt>

**Figure 2:** A typical Gravitational lens effect. Galaxies in wide distances appear as circular sections.



Source: <http://de.wikipedia.org/wiki/Gravitationslinseneffekt>

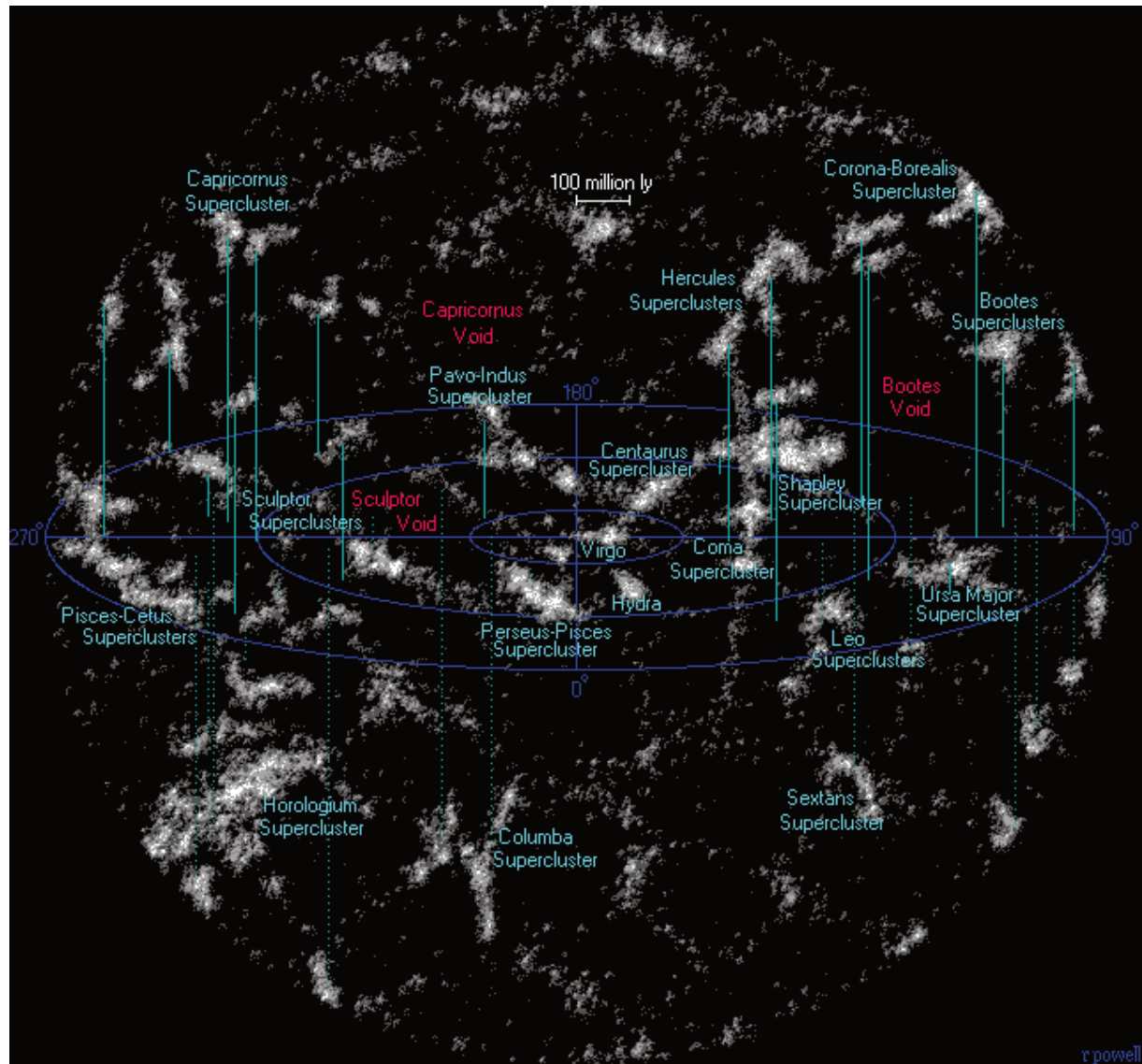
**Figure 3:** Galaxy cluster Cl0024+17, taken by Hubble-Space telescope



## The Voids

On large scales, there are huge voids between galaxy clusters, the so-called voids with an average of 100 million light-years in diameter. The universe on large length scales has a honeycomb structure, a kind of bubble structure.

**Figure 4:** The Universe in a spread of one billion light years around the Earth with local super-clusters and voids.



Source: [http://de.wikipedia.org/wiki/Void\\_\(Astronomie\)](http://de.wikipedia.org/wiki/Void_(Astronomie))

Although the voids have been known for several decades, and the universe is made up of 90% voids, they are poorly understood.

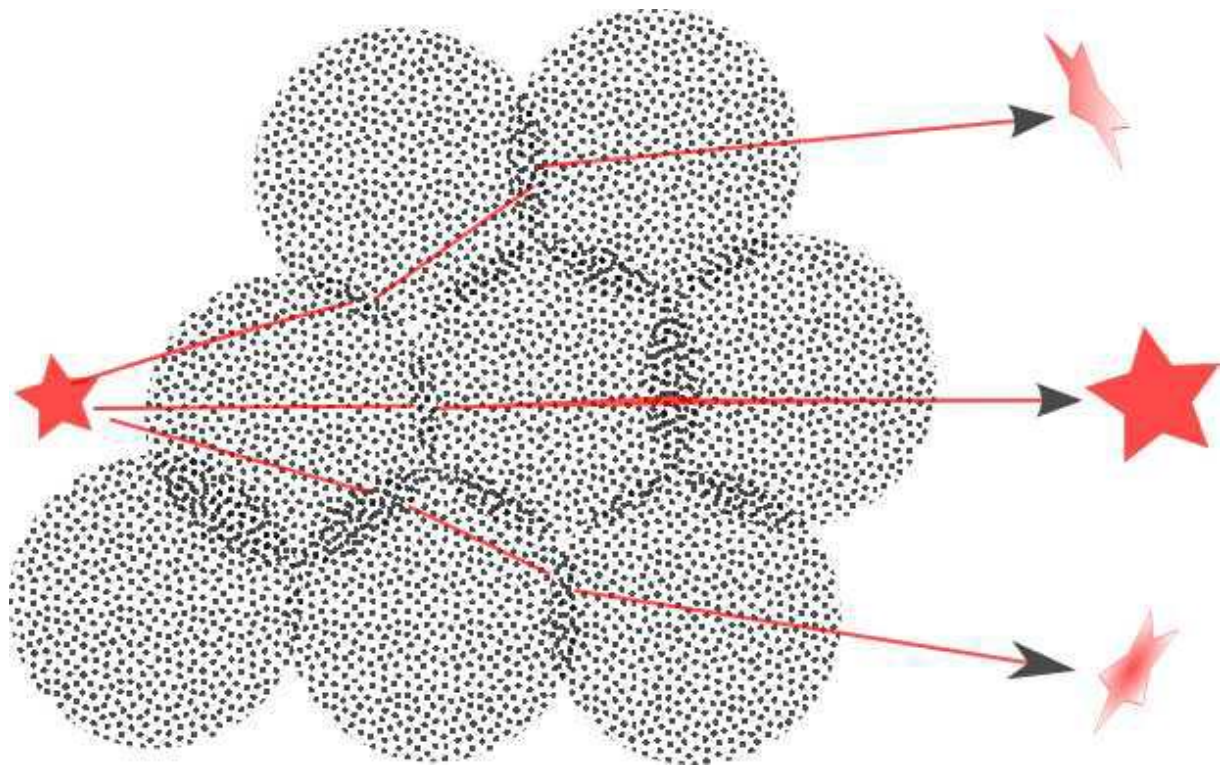
Not only in the macrocosm between planets, solar systems, galaxies, but also in the microcosm, in the atoms and its components, the "empty" space is the relevant element in the universe. In order to understand the universe as a whole, it therefore must first be understood the "empty" space, of which it mainly consists.

## 2. How are voids lenses created ?

The deflection of light rays in the transition into another medium is a long-known optical property of light. In the Voids lenses, the deflection of light takes place after this simple law of refraction.

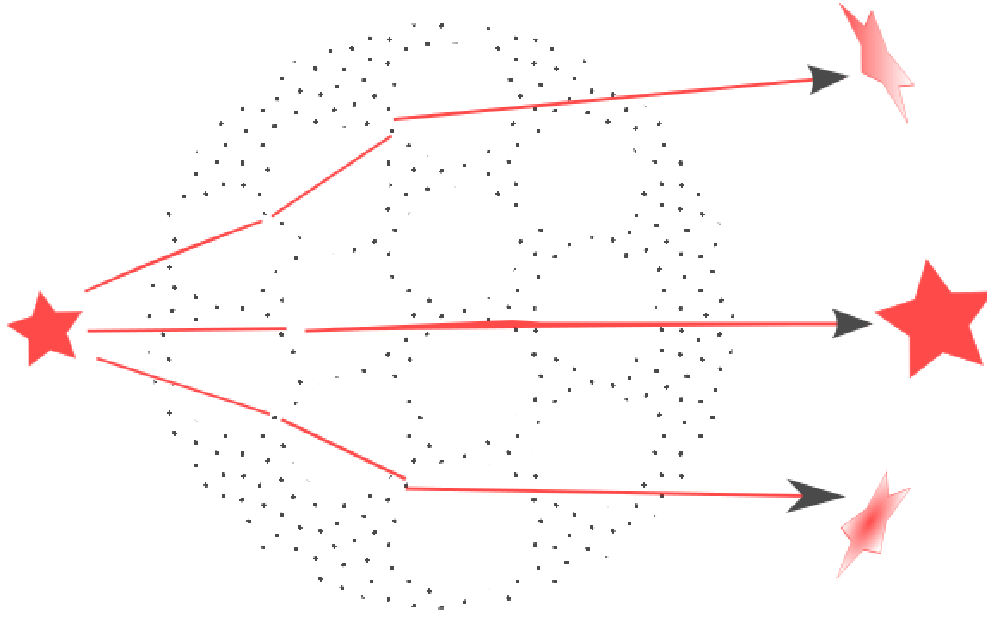
In the huge voids, invisible origin parts are created as a precursor of the "dark matter" which are caused by dynamic processes in the genesis in permanent space creation (this topic I have described in my book "Theory of Everything" in Chapter 6). Thereby at the edges of voids, high concentrations of origin parts are created, which favor the formation of dark matter. The voids therefore do form a denser medium at the edges and the light is thus broken at the transition.

**Figure 5:** Principle of voids lens effects. The points are for illustrative enlarged primordial particles.

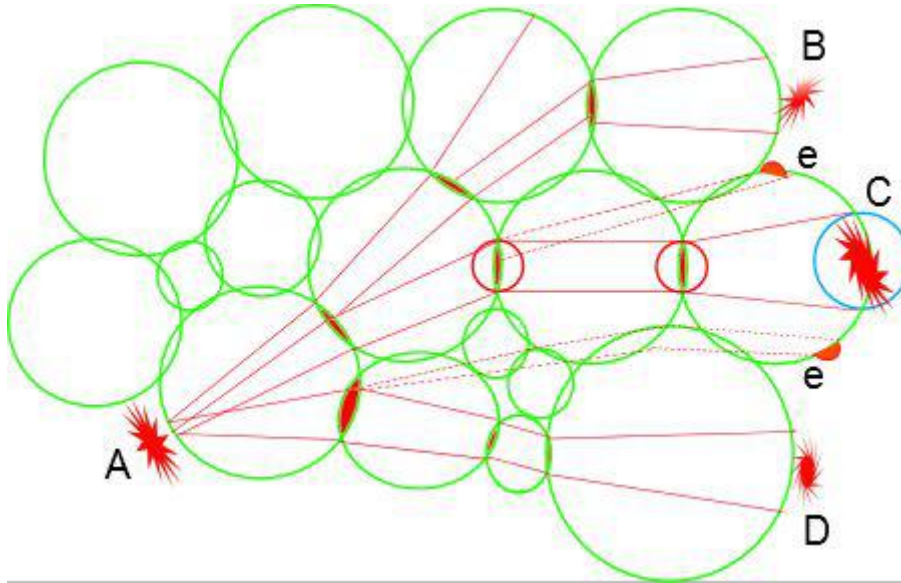


The previously known giant voids between the filaments with an average of 100 million light years in diameter are composed of smaller voids.

**Figure 6:** Large voids are composed of smaller voids



**Figure 7:** The principle of voids lens effects.



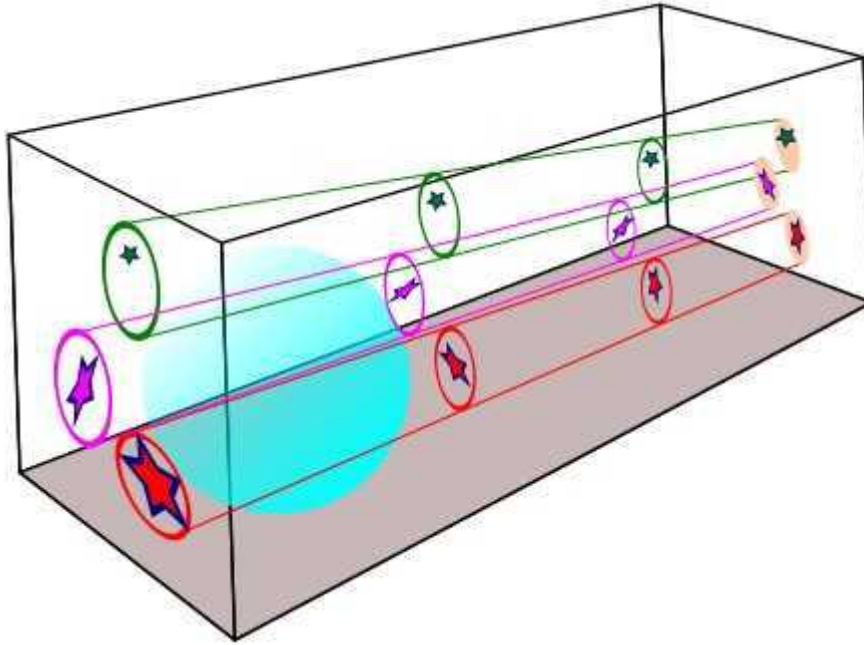
The green circles represent the different sized voids and at the edges, as explained above, natural lenses are developed through increased concentrations of invisible matter, the forerunners of the so-called "dark matter".

In the above image the light rays of Galaxy **A** for example are deflected, enlarged, distorted by different Voids lenses, and appear on the telescope images at different points **B**, **C** and **D**. The Galaxy **A** is therefore differently distorted and pictured in different sizes. Additionally, on the telescopic images also fragments of the Galaxy **A** do appear as shown at points "e", which were so far known as so-called "Einstein Rings".

## Cosmic Rings in the Voids lenses

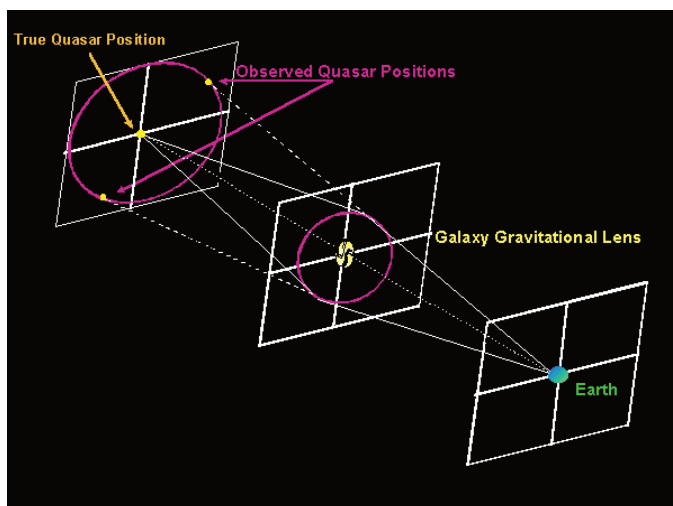
The voids lenses consist of an invisible element and are therefore not directly observable. Only with their Lens effects they become apparent. In the telescope images I have therefore drawn circles with a drawing program in order to illustrate the lens effects. The drawn circles in the respective images are all the same size and the underlying principle is shown in simplified form in the following figure.

**Figure 8:** The turquoise circle is a void that causes lens effects as a kind of "hollow glass ball" and optically magnifies, distorts and breaks a star which is lying behind it into fragments.



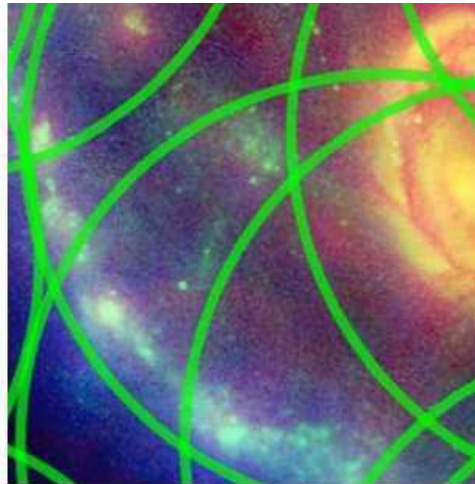
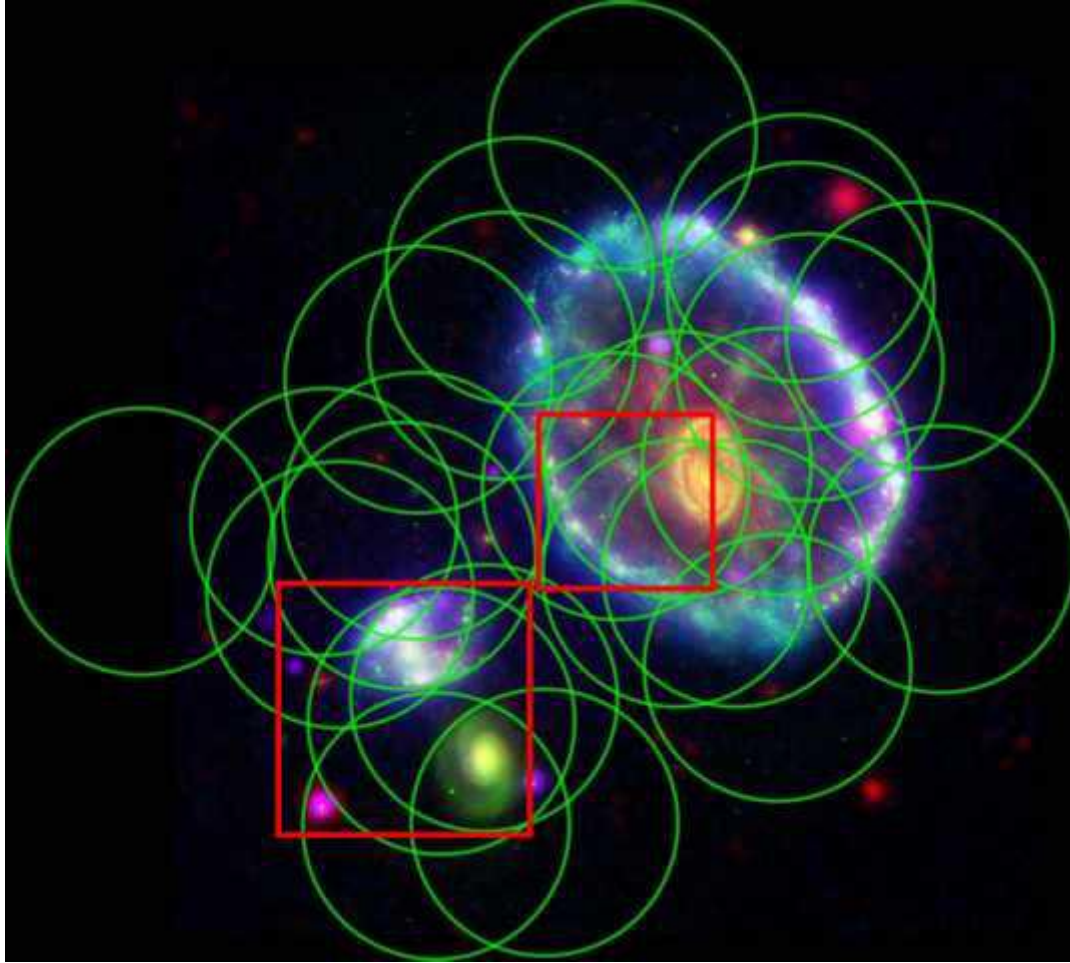
The further we look into the space, the smaller the optical Objects become. The size of the circles, in the picture drawn above shows the distance to the image plane. The further we look into the space the smaller the circles become, just as the imaged objects. I.e. theoretically it is possible to draw many circles of different sizes for different distances in the telescopic images.

**Figure 9:** Gravitational lens effects with rings

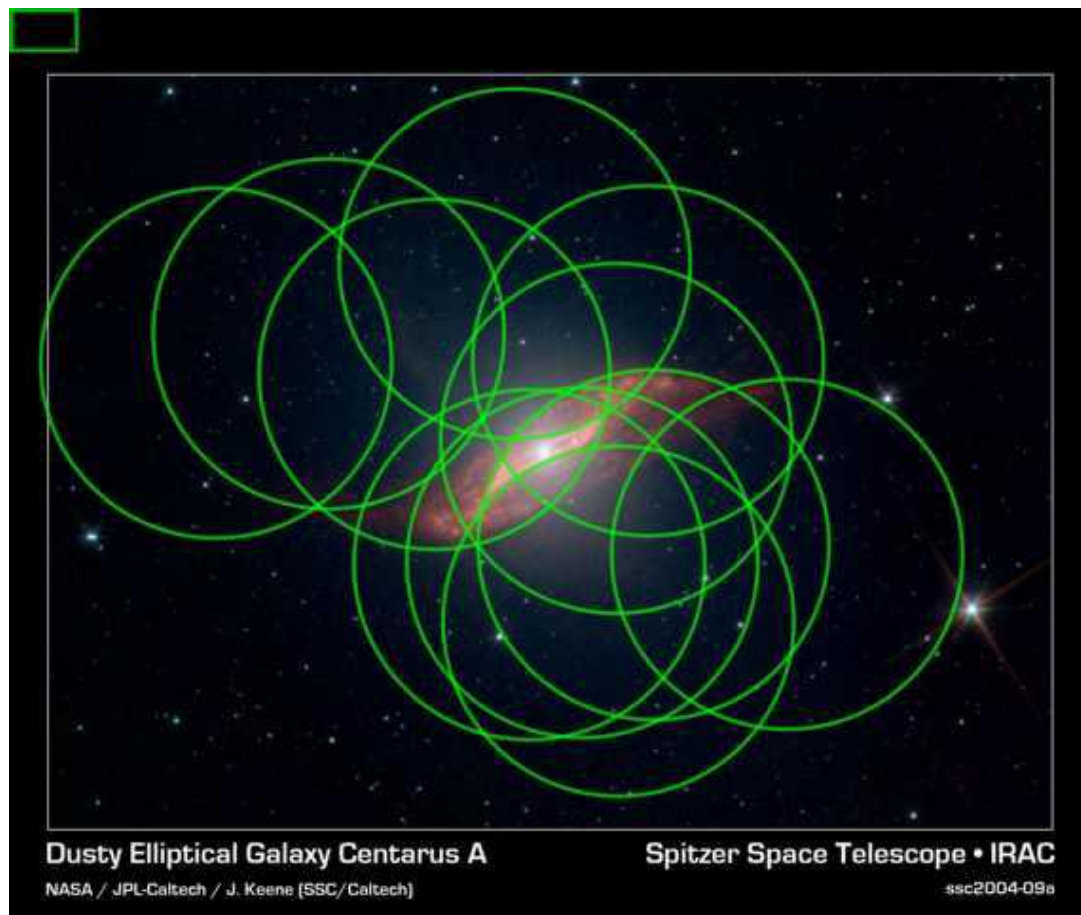


Such rings are also known in the so-called gravitational lenses as shown in the picture above. According to the gravitational lens model, the light rays of celestial objects are redirected by a galaxy, but according to this model, at the center, the galaxy is still visible. However, in the Voids lens effects it is not possible to see objects in the middle, which do deflect the light rays and thus the Voids lenses, as well as the voids themselves are invisible. We still can analyze the Voids lenses based on the distorted images of galaxies.

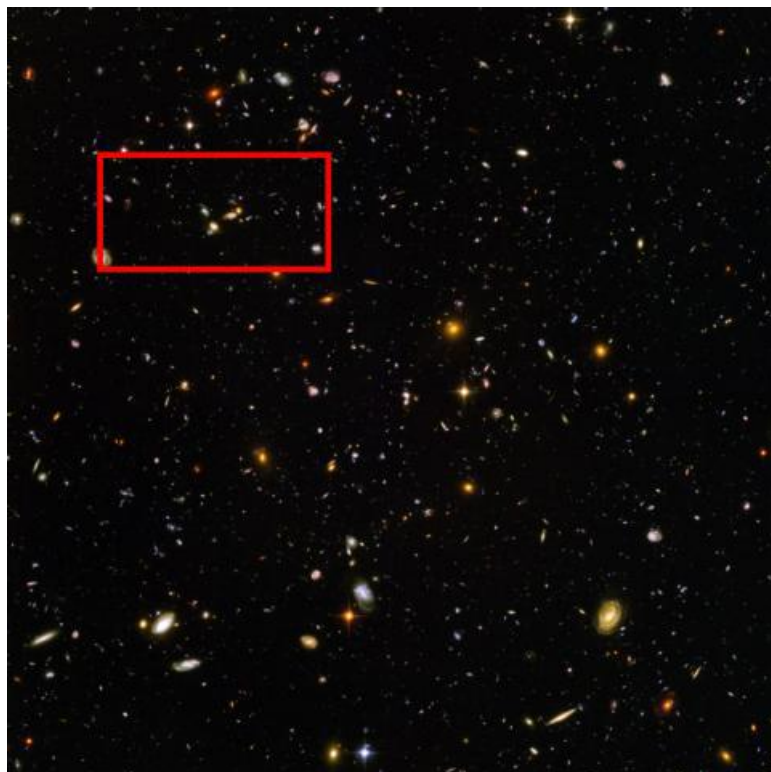
**Figure 10:** The "Cartwheel" Galaxy, taken by the Chandra space telescope. The two prominent points in the red clips are shown enlarged below.



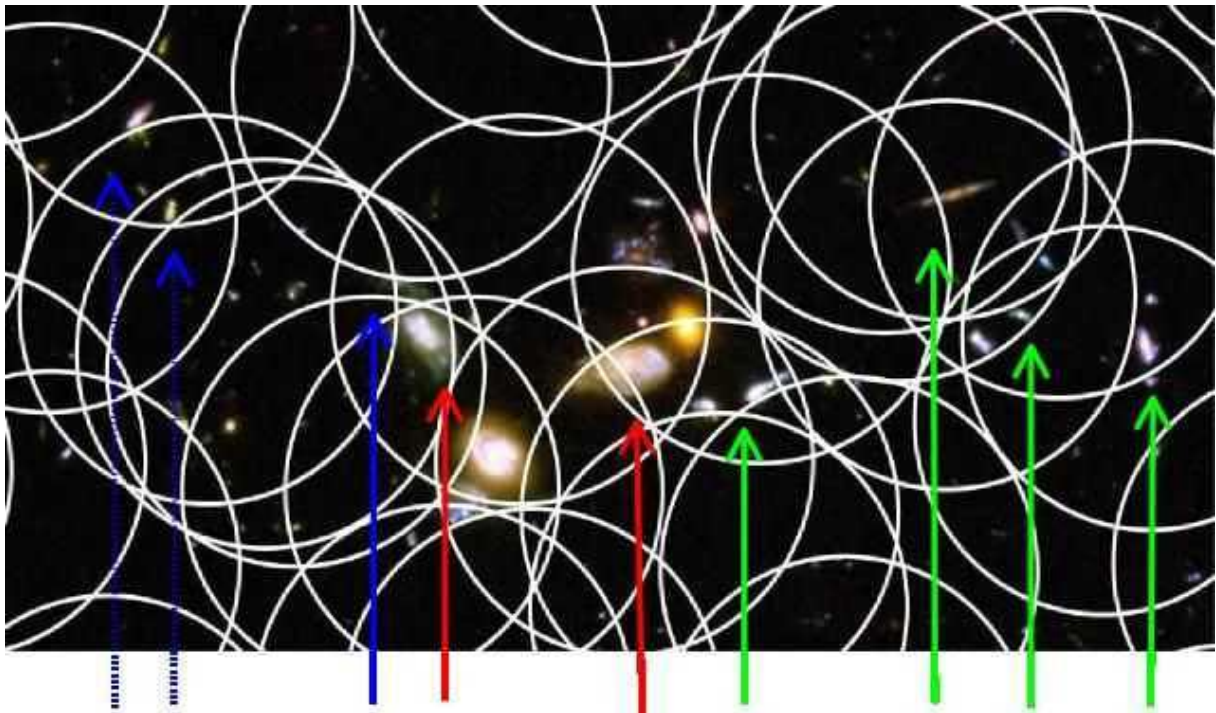
**Figure 11:** The Galaxy "Centaurus A", taken by the Spitzer Space Telescope. The optical distortion of the galaxy through voids lenses, as shown by the circles is clearly visible.



**Figure 12:** "Hubble Ultra Deep Field (HUDF)". The red section is explained below.



**Figure 13:** An excerpt from the image above. The drawn circles are to be regarded as a kind of magnifying glasses. The deformation of the galaxies and galaxy fragments at the edges of the circles is caused by the voids lens effects.



**Red arrows:** In this excerpt we see how the galaxies are optically distorted by the invisible voids lenses.

**Green arrows:** The fragments of the galaxies appear at the edges of the Voids lenses, as well as the so-called Einstein rings in gravitational lenses

**Blue arrows:** A fragment of white galaxy (solid blue line) appears at the edge of another Voids lens (dashed blue lines).

### **We can determine the following issues with the analysis of Voids lenses:**

With the analysis of voids lenses we can analyze the properties of dark matter and dark energy. Using the voids lens effects, we can examine how invisible matter accumulates at the edges of the voids, which ultimately produce the galaxies in large scale which do stick together.

- We can study the topology of the observable universe. With computer programs, you can create a 3D image with the positions of celestial objects pictured from the thousands of fragments of galaxies.
- Since with our telescopes at large distances we also always do look in the past, we can better examine the basis of the voids in the large-scale motions in the universe. For example we can examine the question whether or the universe rotates.

- We can also examine whether or not the universe is constantly expanding or pulsating cyclic through expansion and contraction (this topic I discussed in my book).
- Since the celestial objects, in the telescopic images are not at the shown positions, we can find out the actual positions of distant galaxies by analyzing the voids lens effects. Here we can also examine the question of whether or not it is possible to almost see around the corner because of the complex voids lens effects.
- With the analysis of Voids lenses we can finally develop a new cosmological model of the universe. The existence of large voids is one of the important clues that speak against the Big Bang model. It's already been known for a long time that according to the cosmological standard model of the Big Bang hypothesis, it is not possible that large voids would arise.

### **3. An Alternative Explanation of Lens Effects**

The understanding of the causes of lens effects has far-reaching consequences for astronomy. With our telescopes we see the universe through different sized "hollow glass spheres," which consist of differently sized voids. As a kind of "cosmic censorship" we therefore cannot achieve a look into the distant regions of the universe.

On my website, you can see pictures of telescopes that I have optically analyzed with the help of a simple drawing program. I will first summarize my analysis results briefly below. When viewing the telescope images, the following arguments can be better understood.

#### **There are no gravitational lenses but only voids lenses**

The amplification, attenuation, and distortion of the astronomical images, which takes place through the deflection of light beams so far has been explained as a result of gravity. It is the ordinary optical properties of light in the transition to another medium. For the explanation of astronomical lenses you do not need the effects of gravity, because it is the pure optical properties of light. At Lenses made of glass or other materials, the gravity is not explained as the cause, but the deflection of light due to optical laws that have been known for centuries.

#### **Other Arguments against the gravitational lenses**

- The so-called gravitational lens effects are not visible in any galaxy or cluster of galaxies. Despite billions of galaxies, only relatively few gravitational lenses have been discovered with enormously distorted images so far.
- The lens effects occur at very distant objects. For galaxies in our cosmic neighborhood, gravitational lens effects are not visible. According to the model of gravitational lenses, however, each galaxy would cause the typical distorted lens effects.
- Even with close-ups of individual galaxies, the galaxies are shown in a distorted way. Instead of acting as a gravitational lens for objects in the sky behind it, the shown galaxies themselves are affected by the voids lens effects.

- At the telescope pictures it is possible to clearly see the voids optical lens effects on closer inspection. A galaxy or a cluster of galaxies cannot map the celestial objects gravitationally magnified in the background with the existing image sharpness.

-In contrast to the rarely observed, rather distorted lens effects which was until today thought to be caused by gravity, the Voids lenses from certain distance are available everywhere in the cosmos.

## **The galaxies are not located where they are seen**

This phenomenon has been known for some telescope images and has also been described as a consequence of gravitational lenses. But the more we look into the space, the stronger this effect occurs to a similar shape. Because of the voids-lens effects, we do see Phantom galaxies in the wrong positions.

Not only in highly stylized, typical lens effects, but in the entire cosmos the images of the galaxies are shown in the wrong positions. The further we look into the cosmos, the more optical illusions are shown by the telescopic images.

## **In real, the galaxies do look different**

Through the Void-lens effects, the galaxies in telescope images are mapped in a distorted way. They have irregular shapes and in the pictures one rather sees galaxy fragments than complete galaxies. Through the Void-lens effects irregular galaxy fragments are caused and those photos- until today- have been incorrectly interpreted as galaxies in their formation.

Many images of galaxy-collisions are a result of lens effects and these are optical illusions because in real these are two galaxies in distances.

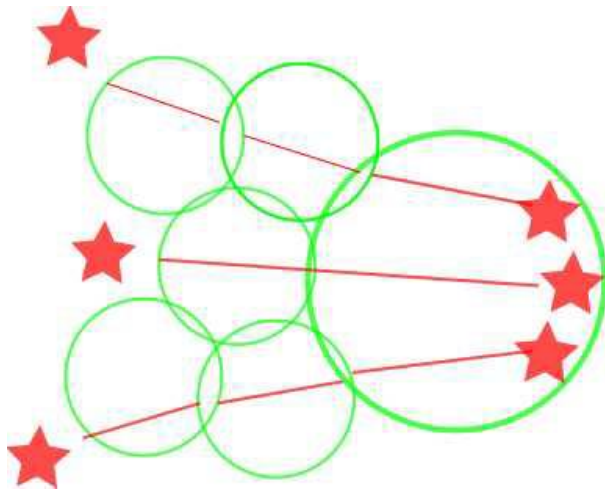
## **There are less Galaxies as seen in the Figures**

When looking into the distant regions of the universe, the objects in the pictures only are a few fragments of galaxies. Through the lens effects, galaxies are optically split into thousands of pieces and they can be seen in a distributed way over the entire image area. Not only complete multiple images of distant galaxies are visible, but the galaxies are also mapped in differently distorted ways.

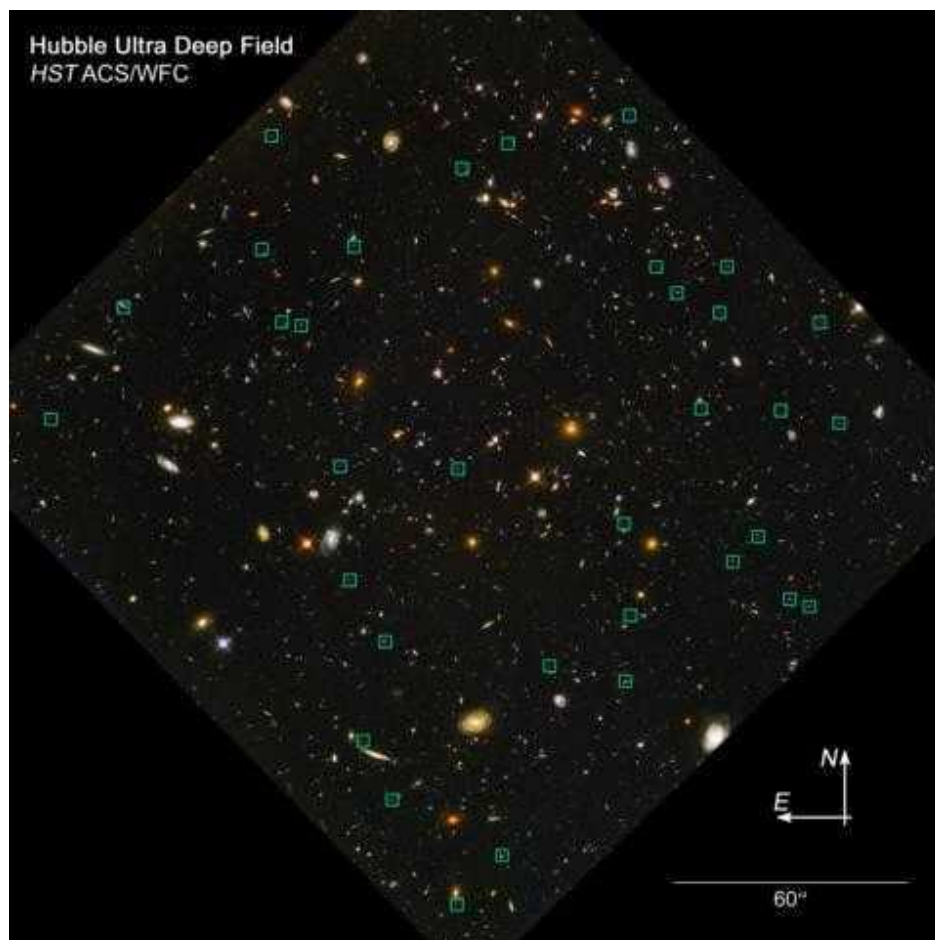
## **Galaxy Clusters as optical Illusion**

Through the Void-lens effects galaxies that are far apart from each other may appear as clusters of galaxies. Just as it can be seen on the phantom galaxies in the telescope images, clusters of phantom galaxies can also be caused by lens effects.

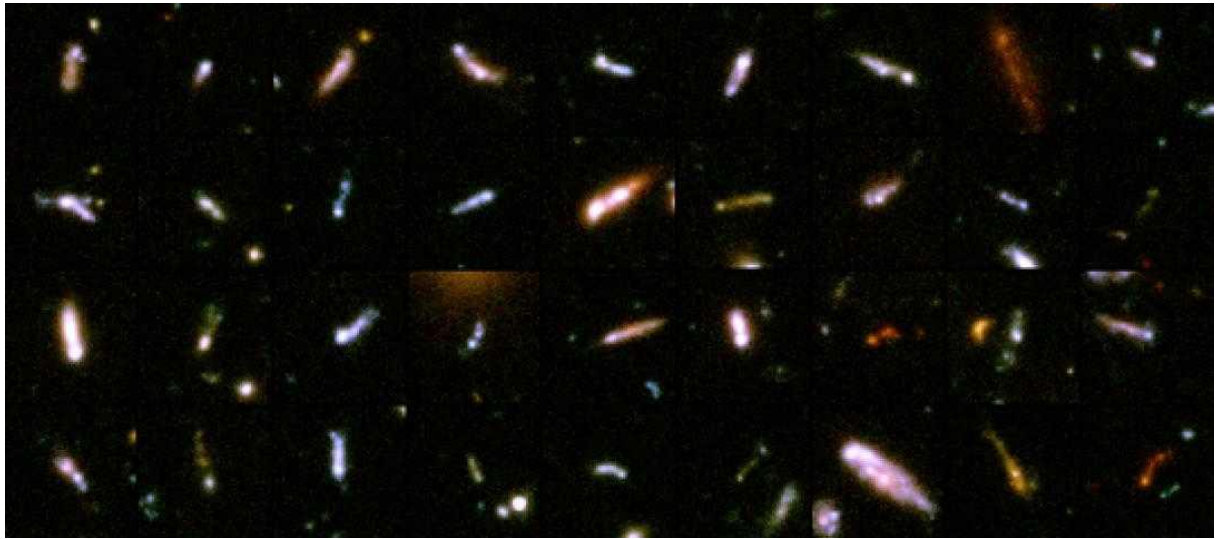
**Figure 14:** Optical illusion of a galaxy cluster, which were caused by voids lenses..



**Figure 15:** The most distant galaxies. According to astronomers, the marked objects are galaxies, however, these are only fragments of galaxies.



**Figure 16:** Here, the figures marked at the top of the picture supposedly are galaxies in a far distance. These Galaxy fragments are also caused by the complex Voids-Lens effects.



## **Summary**

From a certain distance, we always have to consider the optical effects of natural Voids lenses in the telescopic images (I guess from about 10 light-years).

We can better examine the invisible parts of the universe, the so-called dark matter and dark energy with the analysis of the natural lens effects.

With the Void-lens effects, we can gain new insights into the cosmos from the fascinating telescopic images.

## **4. The Telescopic images on my website**

In order to exclude systematic and technical sources of errors, such as lens aberrations or software artifacts, I have examined several pictures of different telescopes (including Amateurastronomers). The Voids- lenses are not only a ubiquitous phenomenon in the optical spectrum, but also outside the visible spectrum of electromagnetic waves.

For further analysis, I recommend the free drawing program Inkspace, with which I have drawn the circles in the telescopic images.

Due to the large file size, the telescopic images are available on my website:

<http://www.hc10.eu/Astronomy.html>